Course Syllabus

Jump to Today ✎ Edit

Contact Information

Instructor

[INSERT PICTURE HERE]

Name: [Type Name Here]
Phone Number: [Type Phone Number Here]
Email (Ivy Tech Email): [Type Email Here]
Office/Campus Location: [Type Location Here-remove this line if none exist]
Office Hours: [Type Office Hours Here-remove this line if none exist]

Instructor's Supervisor

Name: [Type Name Here]
Phone Number: [Type Phone Number Here]
Email (Ivy Tech Email): [Type Email Here]
Office/Campus Location: [Type Location Here-remove this line if none exist]
Office Hours: [Type Office Hours Here-remove this line if none exist]

Ivy Tech Technical Support: Help Desk

Phone: 1-888-IVY-LINE (1-888-489-5463), select option 4
Student Help Center: **http://ivytech.edusupportcenter.com** **(http://ivytech.edusupportcenter.com)**
Submit a Help Ticket: **https://helpdesk.ivytech.edu/SelfService/Create.html**
(http://helpdesk.ivytech.edu/SelfService/Create.html)

Ivy Tech Online Learning Support

Name: [Type Name Here]
Phone Number: [Type Phone Number Here]
Email (Ivy Tech Email): [Type Email Here]
Office/Campus Location: [Type Location Here-remove this line if none exist]
Office Hours: [Type Office Hours Here-remove this line if none exist]

Disabilities Support Contact

Regional DSS: **http://ivytech.edu/dss/ (http://ivytech.edu/dss/)**

Required Text & Materials

Title: PRELUDE TO PROGRAMMING CONCEPTS AND DESIGN
Author: STEWART VENIT AND ELIZABETH DRAKE
Edition: 6TH EDITION
Publisher: PEARSON
Official Book - ISBN: 9780133750409 - Electronic version of Book and Code

The official book is an electronic book. If students prefer a Hard Copy Book, they can order using book and access code by using ISBN: 9780133741636. Hard copy book is not required but optional.

Recommendations for Book Ordering (click on this link for more info)

Course Outline of Record

SDEV 120, COMPUTING LOGIC

COURSE TITLE: Computing Logic COURSE NUMBER: SDEV 120

PREREQUISITES: Demonstrated competency through appropriate assessment or earning a grade of “C” or better in ENGL 083 Reading Strategies for College or ENGL 095 Integrated Reading and Writing, MATH 080 Mathematical Principles or MATH 100 Intermediate Algebra. SCHOOL: Computing and Informatics

PROGRAM: Software Development CREDIT HOURS: 3

CONTACT HOURS: Lecture: 3

DATE OF LAST REVISION: Fall, 2014 EFFECTIVE DATE OF THIS REVISION: Fall, 2015

CATALOG DESCRIPTION: Introduces the student to algorithms, logic development and flowcharting as tools used to document computer logic. Students will study math concepts and the importance to computer development. Included areas of study are base numbering systems, truth tables, logic and relational operators. Other concepts covered are order of precedence, decision trees, security, different types of

language approaches, and scripting. Students will practice skills such as listening, team building, work ethic, communications, documentation, and adaptability. Concepts will be demonstrated using basic scripting and simple programming code.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Identify the standard documentation tools of displaying algorithms such as pseudocode, flowchart symbols and
2. Apply basic logical structures, file handling, matrices, and arrays to program
3. Construct truth tables, and apply Boolean logic, decision tree logic, relational operators and logical operators to program algorithms
4. Use set theory and logic gate theory to develop program
5. Use puzzles and games to enhance problem-solving
6. Apply key techniques to visually represent data such as graphs, charts and
7. Develop algorithms using tools such as data flow diagrams, flowcharts, use case diagrams, activity diagrams, and state
8. Apply critical thinking and problem solving
9. Apply base numbering systems techniques to convert numeric data to any base numbering format, including binary, decimal and
10. Identify the uses of various programming and scripting languages in computer
11. Develop a simple program and/or
12. Define the Software Development Life Cycle as it pertains to software development and problem
13. Discuss the concepts and justifications for using secure design
14. Describe the different methods for encoding data such as BCD, 1’s complement, 2’s complement, ASCII and
15. Employ team building, work ethic, and communication

COURSE CONTENT: Topical areas of study include:
Algorithms and Algorithm Development
Logic Development
Math Concepts
Numbering Systems: Binary, Decimal, Hexadecimal
Basic Programming Control Structures
Flowcharting and Pseudocode
Relational and Logical Operators
Order of Precedence
Truth Tables and Decision Trees
Data Validation
Scripting
Work Ethic
Software Development Life Cycle
Deductive and Inductive Logic Set Theory

Logic Structures
Fuzzy Logic and Ladder Logic
Logic Gate Theory
Puzzles and Games
Graphing
Unified Modeling Language

College Policies & Support Services (click on this link to review)

Students are strongly encouraged to click the link above to review standard College policies and information on academic support services.

Course Policies & Procedures

Instructional Method

This is an online distance learning course. Each week's assignments and readings are summarized on the calendar, accessed from the Calendar button in IvyLearn. It takes a great deal of discipline, self-motivation, and effective time management skills to successfully complete an online course. Many students find it helpful to set aside specific times each week to work on course assignments.

Grades

All grades will be maintained in IvyLearn's online grade book. Students are responsible for tracking their progress by referring to the online grade book. Students can generally expect to receive grades and feedback within seven days of the assignment due date. If exceptions occur, the instructor may notify students of changes to this expectation.

Due Dates & Deadlines

The Syllabus and Calendar are two important tools to help students understand the course, student and instructor expectations, and deadlines. Both tools can be found in IvyLearn. The Calendar can be accessed from the main navigation area on the left-hand side of IvyLearn.

Students are required to submit work on time for a chance to receive credit. Deadlines for each week/assignment are summarized on the calendar. Students should check the calendar frequently for

deadlines and to be aware of what to expect next. Deadlines are listed in Eastern Time and are subject to change.

Students are responsible for timely assignment submission. Should a computer system or network go down, students must still turn in work in a timely manner. Don't wait until the last minute. Plan ahead by seeking alternative means for submitting work before it is due. Local libraries and all Ivy Tech Community College campuses can serve as alternative resources. Contact the closest/most convenient campus or other public lab for schedules and Internet availability. Not having access to the required software on a home or work computer is **not** a legitimate excuse for turning in homework late.

Make-Up Policy

Late assignments will be assigned a grade of "0" unless a student has received prior approval from the professor. If a student has a problem or scheduling conflict that prevents the student from submitting an assignment on time, the student should contact the professor immediately. The professor will determine if the seriousness of the problem warrants an extension on the assignment. Unless absolutely unavoidable, students need to contact their instructor ***before*** missing the deadline – not after. Instructors have the right to decline accepting work for any credit after a deadline passes with a few specific exceptions, including but not limited to:

- If there is an outage of the IvyLearn system that is verified by central system administrators, instructors will provide an extension for students to submit work at no penalty.
- If the student has documentation of serious illness or death of a family member, instructors will work with the student to determine an alternate deadline.

Attendance Policy – Don't Get Dropped from Class!

Ivy Tech performs administrative drops for students who do not "attend" class early in the semester. ***Students need to complete an assignment (***which may include, but are not limited to, such things as attending a live or synchronous session; posting in a graded discussion board, blog or wiki; or submitting a written assignment or taking a quiz) ***prior to NW deadline listed below in order to avoid being dropped for non-attendance.*** Posting any items not related to the graded assignments will be reviewed but may be disqualified for attendance purposes.

Attendance Drop Deadline: Friday, Sept 1 – Eastern Time.

Am I Required to Come to Campus for this Course?

Some online courses require students to go to a local Ivy Tech campus for an activity, lab, or proctored assessment. For this course:

No, students do not have to come to campus for this course. There are no activities, labs, or assessments that require students to come to campus.

Last Day to Withdraw

If a student wishes to withdraw from this course, students are responsible for completing an official withdrawal form with the registrar. Your local registrar contact information can be looked up here: **http://www.ivytech.edu/registrar/ (http://www.ivytech.edu/registrar/)** .

The last day to withdraw from this course is November 11.

Course Communication

Online Communication Etiquette

Students are expected to uphold their responsibilities in terms of appropriate and professional communication with faculty and peers. Please review the 'Students Rights and Responsibilities' section of the student handbook (located within Campus Connect) and review common netiquette (Internet etiquette) practices, like those found at: **https://www.ivytech.edu/online/11570.html (https://www.ivytech.edu/online/11570.html)**

Instructor Commitment

Ivy Tech Community College instructors are committed to responding to students' written inquiries sent via the conversations tool in IvyLearn (instructions below), within 36 hours, including weekends. Students can contact their local Online Technologies Support with questions (**http://ivytech.edu/online/contacts.html (http://ivytech.edu/online/contacts.html)**).

Conversations

All students must use the conversations feature of IvyLearn for course-related communications. Using conversations, students can send and receive messages from within IvyLearn. Conversations can *only* be sent and received from within IvyLearn. Please check Conversations frequently.

For information on how to access Conversations (send and receive) **click this link to open the Canvas Guides (https://community.canvaslms.com/docs/DOC-2666) (https://community.canvaslms.com/docs/DOC-2666)** . The Canvas Guides will provide you with the necessary information to get started with conversations within IvyLearn.

Notifications

IvyLearn has a robust notification system that students can opt to use to receive course notifications for many course activities and events such as new announcements, due dates, and grade updates. Students can receive those notifications via many different channels including text messages and are highly encouraged to customize their notifications. To learn more about notifications and how to setup and customize notifications, please review the guide here: **https://guides.instructure.com/m/4152/l/73162-how-do-i-set-my-notification-preferences (https://guides.instructure.com/m/4152/l/73162-how-do-i-set-my-notification-preferences)** .

Additional Communication Options

Below are several additional optional ways to communicate with your instructor:

GoToMeeting – Description …

Phone – Description …

Assignments & Grading

How is my grade calculated?

Discussion Boards

There will be 5 discussions for this class and are listed on the calendar. Each student will be responsible for responding to the prompt for that discussion and then replying to the specified number of other students as stated in the discussions rubric in the Resources area of the course. No late discussions will be accepted.

Assessments

Assignments: Students will be required to complete 14 Assignments. Assignments will include using the Programming Challenges end of chapter assignments.

Quizzes: 12 quizzes will be used to ensure students are comprehending the learning materials. The quizzes will cover the content presented in the 7 chapters of the Venit/Drake book. Quizzes can include multiple choice, short answers and fill in the blanks type questions. Each student will have two attempts at each quiz, with the highest score being recorded. Students should allow themselves ample time to complete the reading before attempting each quiz.

Exams: A Midterm will cover the content presented in the first 7 weeks and a Final exam will cover the content presented in weeks 8-15. A total of 2 exams will be given.

Class Project*:* Students will be expected to demonstrate their comprehension of the content they have learned in the course by completing an individual project. This project will be a programming logic project. Students will use all the concepts and course objectives learned throughout this course.

Grading Scale and Weights

5 Discussion Boards	30 points each	150
14 Assignments	50 points each	700
1 Individual Project	150 points	150
2 Exams	150 points each	300
12 Quizzes	25 points each	300
	Total Points	1600

Grading Scale

A	1440-1600
B	1280-1439
C	1120-1279
D	960-1119
F	959 and below

Course Summary:

Date	Details	
Sun Aug 27, 2017	**Download Raptor** (https://ivylearn.ivytech.edu/courses/767736/assignments/6811189)	due by 11:59pm
	M01 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6811185)	due by 11:59pm
	M01 Engage: Introductions Discussion Board (https://ivylearn.ivytech.edu/courses/767736/assignments/6811163)	due by 11:59pm

Date	Details	
Sun Sep 3, 2017	M02 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6828912)	due by 11:59pm
Sun Sep 10, 2017	M03 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6828913)	due by 11:59pm
	M03 Engage: Discussion Board (https://ivylearn.ivytech.edu/courses/767736/assignments/6855282)	due by 11:59pm
	M03 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6914181)	due by 11:59pm
Sun Sep 17, 2017	M04 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6911210)	due by 11:59pm
	M04 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6836706)	due by 11:59pm
Sun Sep 24, 2017	M05 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6920614)	due by 11:59pm
	M05 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6836707)	due by 11:59pm
Sun Oct 1, 2017	M06 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6836711)	due by 11:59pm
	M06 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6836710)	due by 11:59pm
Sun Oct 8, 2017	M07 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6847331)	due by 11:59pm
	M07 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6909464)	due by 11:59pm
Sun Oct 15, 2017	M08 Engage: Discussion Board (https://ivylearn.ivytech.edu/courses/767736/assignments/6847332)	due by 11:59pm
	M08 Evaluate: Midterm Exam (https://ivylearn.ivytech.edu/courses/767736/assignments/6865811)	due by 11:59pm
Sun Oct 22, 2017	M09 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6866194)	due by 11:59pm
	M09 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6865762)	due by 11:59pm

Date	Details	
Sun Oct 29, 2017	M10 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6865763)	due by 11:59pm
	M10 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6866215)	due by 11:59pm
Sun Nov 5, 2017	M11 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6866274)	due by 11:59pm
	M11 Engage: Discussion Board (https://ivylearn.ivytech.edu/courses/767736/assignments/6966372)	due by 11:59pm
	M11 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6865764)	due by 11:59pm
Sun Nov 12, 2017	M12 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6865765)	due by 11:59pm
	M12 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6866340)	due by 11:59pm
	M12 Evaluate: Final Project Progress Report (https://ivylearn.ivytech.edu/courses/767736/assignments/7023754)	due by 11:59pm
Sun Nov 19, 2017	M13 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6865766)	due by 11:59pm
	M13 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6866342)	due by 11:59pm
	M13 Engage: Discussion Board (https://ivylearn.ivytech.edu/courses/767736/assignments/6839276)	due by 11:59pm
Sun Dec 3, 2017	M14 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6866348)	due by 11:59pm
	M14 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6865785)	due by 11:59pm
Sun Dec 10, 2017	M15 Apply: Homework Assignment (https://ivylearn.ivytech.edu/courses/767736/assignments/6866350)	due by 11:59pm
	M15 Evaluate: Final Project Submission (https://ivylearn.ivytech.edu/courses/767736/assignments/7023755)	due by 11:59pm
	M15 Evaluate: Quiz (https://ivylearn.ivytech.edu/courses/767736/assignments/6865801)	due by 11:59pm
Sat Dec 16, 2017	M16 Evaluate: Final Exam (https://ivylearn.ivytech.edu/courses/767736/assignments/6865813)	due by 11:59pm